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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,553	12/27/2001	Hubert Gehring	Q67543	9577

7590 06/16/2005

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EXAMINER
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EL HADY, NABIL M

ART UNIT	PAPER NUMBER
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2152

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/026,553

**Applicant(s)**

GEHRING ET AL.

**Examiner**

Nabil M. El-Hady

**Art Unit**

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. In view of the Appeal Brief filed on 3/11/2005, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. Claims 1-24 are presented for examination.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3,9-12,16-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Lin et al. "Asynchronous Remote Procedure Call System for Heterogeneous Programming", IEEE, 1991, hereinafter "Lin".

5. Lin et al., is cited by the applicant in IDS paper filed 12/27/2001.

6. As per claim 1, Lin discloses a system for transmitting data between a local data processing device and a remote data processing device through an asynchronous transmission channel for use with distributed objects in the field of automation technology (Fig. 2), said system comprising: a memory assigned to the local data processing device for storing at least one predefinable parameter to identify a call sent by a first program of the local data processing device to a second program of the remote data processing device to solicit data from the second program of the remote data processing device to the local data processing device ( P155, right col., 2<sup>nd</sup> parag., S queue is interpreted as a memory assigned to the local processing device for storing a header generated for the call, the header is interpreted as predefined parameter to identify the call, the header contains the process ID generated by the client and used to claim the reply); means for integrating the predefinable parameter into response data sent by the remote data processing device to the local data processing device ( P 156, left col., 1<sup>st</sup> parag., the result or reply is attached or integrated to the corresponding header representing the predefinable parameter which is held in W queue in the remote data processing device and is send back to the client); means for identifying the predefinable parameter in the response data (inherent in P 155, right col., 3<sup>rd</sup> parag., client will try to match the incoming reply header or identifier with the headers or identifiers in the S queue ); and means for synchronizing the response data such that by identifying the predefinable parameter in the response data, the response data of the second program of the remote data processing device is integrated into the first program of the local data processing device ( inherent in P 155, right col., 3<sup>rd</sup> parag., the reply will be processed and the header will be dequeued from the S structure accordingly).

7. As per claim 11, it is rejected for similar reasons as stated above.

8. As per claim 18, it is rejected for similar reasons as stated above.
9. As per claim 2, Lin discloses means for comparing the stored predefinable parameter stored in said memory of the local data processing device with the predefinable parameter contained in the response data ( P 155, right col., 3<sup>rd</sup> parag., match the incoming reply's header with the headers in the S queue).
10. As per claim 12, it is rejected for similar reasons as stated above.
11. As per claim 19, it is rejected for similar reasons as stated above.
12. As per claim 3, Lin discloses the first program of the local processing device is a user program and the second program of the remote data processing device is a server program ( P 155, right col., last parag.)
13. As per claim 20, it is rejected for similar reasons as stated above.
14. As per claim 9 Lin discloses the second data processing device stores the predefined parameter received from the first data processing device on a stack and restores the predefined parameters before a callback is sent to the first data processing device ( P 156, left col., 1<sup>st</sup> parag., dedicated W queue).
15. As per claim 16, it is rejected for similar reasons as stated above.

16. As per claim 10, Lin discloses a user callback is constructed identically to an original call ( P 156, left col., 1<sup>st</sup> parag).

17. As per claim 17, it is rejected for similar reasons as stated above.

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 4,5 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin in view of King (6,587,122).

20. As per claim 4, Lin does not specifically disclose that the system is used in the field of automation technology to operate and monitor programmable controllers. King clearly shows a system, wherein the system is used in the field of automation technology to operate and monitor programmable controllers (e.g. col. 6, lines 39-45). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Lin and King. The motivation would have been to provide for a distributed automated system for faster processing and control of industrial systems.

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21. As per claim 5, Lin does not specifically disclose the program controllers are selected from the group comprising, stored program controllers, numerical controls and numeric drives. King shows a system wherein the program controllers are selected from the group comprising, stored program controllers, numerical controls and numeric drives (e.g. col. 6, lines 45-54). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Lin and King. The motivation would have been to provide for distributed controls with minimal overhead for faster processing of industrial automated systems.

22. As per claim 21, it is rejected for similar reasons as stated above.

23. Claims 6,13 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin in view of Dan et al. (6,148,290) (hereinafter Dan).

24. As per claim 6, Lin does not specifically disclose the predefinable parameter is formed at least from parts of the IDL (Interface Definition Language) transmitted by the first program to the second program. Dan shows a system wherein the predefinable parameter is formed at least from parts of the IDL (Interface Definition Language) transmitted by the first program to the second program (e.g. col. 2, lines 38-50). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Lin and Dan. The motivation would have been to create a standard between the two programs for communications.

25. As per claim 13, it is rejected for similar reasons as stated above.

26. As per claim 22, it is rejected for similar reasons as stated above.

27. Claims 7,8,14,15,23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin in view of Judge et al. (6,430,570) (hereinafter Judge).

28. As per claim 7, Lin does not specifically show a system wherein the system is used in connection with client applications in embedded systems. Judge shows a system wherein the system is used in connection with client applications in embedded systems (e.g. col. 5, lines 20-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Lin and Judge. The motivation would have been for smaller applications to function in a distributed system, thus reducing the overhead.

29. As per claim 14, it is rejected for similar reasons as stated above.

30. As per claim 23, it is rejected for similar reasons as stated above.

31. As per claim 8, Lin does not specifically disclose the embedded systems are DCOM (Distributed Component Object Model) systems. Judge shows a system wherein, the embedded systems are DCOM (Distributed Component Object Model) systems (e.g. col. 5, lines 30-36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Lin and Judge. The motivation would have been to make the embedded client objects more standard.

32. As per claim 15, it is rejected for similar reasons as stated above.



33. As per claim 24, it is rejected for similar reasons as stated above.


34. Applicant's arguments filed 3/1/2005 have been fully considered but are moot in view of the new ground(s) of rejection.

35. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nabil M. El-Hady whose telephone number is (571) 272-3963. The examiner can normally be reached on 9:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 13, 2005

  
Nabil El-Hady, Ph.D, M.B.A.  
Primary Patent Examiner  
Art Unit 2154